

LISTING OF CLAIMS

1. (currently amended) An isolated p42 nucleic acid encoding a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, wherein said isolated p42 nucleic acid comprises a nucleic acid which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3 sequence having at least 95% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

2. (previously presented) The nucleic acid of Claim 1, wherein said isolated p42 nucleic acid has enhanced RNA transcription and stability in a tobacco plant host cell.

3. (canceled)

4. (currently amended) The isolated p42 nucleic acid of Claim 1 comprising the nucleic acid sequence of SEQ ID NO: ~~31~~ or SEQ ID NO: 3.

5. (currently amended) An *Agrobacterium*-mediated plant expression system for the production of a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, said system comprising a DNA construct consisting of operatively linked nucleic acid encoding a modified T-region but no vir-region, wherein said modified T-region comprises naturally occurring border sequences consisting of about 23 nucleotides at the extremities of said modified T-region and wherein said modified T-region further comprises a nucleic acid ~~which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3~~ sequence having at least 95% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

6-9. (canceled)

10. (previously presented) A method for production of a p42 polypeptide, comprising the steps of:

- (a) introducing an *Agrobacterium* strain into a plant cell wherein said *Agrobacterium* strain comprises at least one plasmid comprising the vir-region of a tumor-inducing plasmid but having no T-region, and at least one other plasmid

comprising the modified T-region of Claim 5 but having no vir-region, wherein said plant cell becomes transformed; and

(b) extracting said p42 polypeptide from said transformed plant cell.

11. (canceled)

12. (original) The method of Claim 10 wherein said *Agrobacterium* strain is *Agrobacterium tumefaciens* strain LBA4404.

13-16. (canceled)

17. (currently amended) The isolated p42 nucleic acid of Claim 1 ~~comprising the nucleic acid sequence of SEQ ID NO: 1~~ having a nucleic acid sequence with at least 95% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

18. (currently amended) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region comprises the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

19. (currently amended) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region ~~comprises the nucleic acid sequence of SEQ ID NO: 3~~ has a nucleic acid sequence with at least 95% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

20. (new). The isolated p42 nucleic acid of Claim 1, wherein said nucleic acid comprises a nucleic acid sequence having at least 98% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

21. (new). The isolated p42 nucleic acid of Claim 20 having a nucleic acid sequence with at least 98% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

22. (new). The isolated p42 nucleic acid of Claim 21 having the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

23. (new) The *Agrobacterium*-mediated plant expression system of Claim 5, wherein the modified T-region comprises a nucleic acid sequence having at least 98% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

24. (new) The *Agrobacterium*-mediated plant expression system of Claim 23, wherein the modified T-region has a nucleic acid sequence with at least 98% sequence identity to the nucleic acid sequence of SEQ ID NO: 1 or SEQ ID NO: 3.

25. (new) The *Agrobacterium*-mediated plant expression system of Claim 24, wherein the nucleic acid sequence of the modified T-region is SEQ ID NO: 1 or SEQ ID NO: 3.